

BRYCE FREEMAN
ADMINISTRATOR

DENISE PARRISH
DEPUTY ADMINISTRATOR



MATTHEW H. MEAD
GOVERNOR

Office of Consumer Advocate

2515 Warren Ave., Suite 304
Cheyenne, Wyoming 82002

Telephone 307-777-7427

FAX 307-777-5748

TTY 307-777-5723
<http://psc.state.wy.us/oca.htm>

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Submitted electronically to www.regulations.gov

Mr. Carl Daly
Director, Air Programs
Environmental Protection Agency Region 8
Mailcode: 8P-AR
1595 Wynkoop Street
Denver, CO 80202 -1129

Re: Docket ID No. EPA-R08-OAR-2012-0026-0098
Federal Register Number: 2013-16295
CFR: 40 CFR Part 52
RIN: "Not Assigned"

Comments of the Wyoming Office of Consumer Advocate on Approval, Disapproval and Promulgation of Implementation Plans; State of Wyoming; Regional Haze State Implementation Plan; Federal Implementation Plan for Regional Haze

Dear Mr. Daly:

The Wyoming Office of Consumer Advocate (hereinafter OCA) welcomes the opportunity to provide these comments in response to the Environmental Protection Agency's (hereinafter EPA) intent to partially approve, partially disapprove and adopt a Federal Implementation Plan (hereinafter FIP) in lieu of approving the State Implementation Plan (SIP) to comply with Regional Haze requirements under the Clean Air Act (CAA) published in the Federal Register on June 10, 2013. 78 Fed. Reg 111.

The OCA is a State Chartered, public interest consumer advocacy agency whose statutory charge is to "represent the interests of Wyoming citizens and all classes of utility customers in matters involving public utilities".¹ In carrying out its duties under the Wyoming Statutes, the OCA is required to "consider all relevant factors, including, but not limited to, the provision of safe,

¹ W.S. § 37-2-401.

efficient and reliable utility services at just and reasonable prices”.² The EPA’s proposed action in this docket will profoundly impact the ability of Wyoming utilities to provide safe, adequate and reliable electric service at just and reasonable prices. As such, the OCA has a deeply rooted interest in the outcome of this proceeding.

Wyoming is unique among all of the 50 states. Wyoming is the nation’s leading producer of low sulfur, sub-bituminous coal which has helped utilities in many other areas of the country meet increasing consumer demands for electric energy while economically complying with sulfur emission limitations imposed under the Clean Air Act (hereinafter CAA). Wyoming is also the nation’s third leading state in natural gas production behind only Texas and Louisiana.³ Natural gas is a relatively clean and affordable source of energy and its increasing use in electric power generation has helped lower the carbon emission trajectory of the country. Wyoming also has the nation’s leading reserve of Uranium Ore.⁴

Wyoming is also home to some of the best renewable resources in the lower 48 states. Wyoming has over 1,400 MWs of installed wind capacity ranking 14th among the 50 states,⁵ with the potential to host more than 550 GWs of wind generation which ranks Wyoming 8th among the 50 states for wind generation potential.⁶ In fact, Wyoming has the most abundant on-shore wind resource of any state in the Western Interconnection.⁷ Although not as robust, Wyoming contains significant potential solar, geothermal and biomass energy resources as well.⁸ All of these resources, in addition to a modest amount of federal hydro power, combine to make Wyoming the nation’s second leading producer of Btu equivalent energy, behind only Texas, with the potential to produce much more, both from fossil and renewable resources.

² Ibid.

³ Rankings: Natural Gas Marketed Production, 201, U.S. Energy Information Administration, http://www.eia.gov/state/rankings/?_sid=US#/series/47&CFID=9265762&CFTOKEN=d98f00ed5bd7c046-739DE96F-25B3-1C83-542EC7AEE5EBFE81&jsessionid=8430102d5cb071ab3c78202e1ec226c431f7 .

⁴ U.S. Uranium Reserves Estimates, U.S. Energy Information Administration, <http://www.eia.gov/cneaf/nuclear/page/reserves/ures.html> .

⁵ U.S. Department of Energy, National Renewable Energy Laboratory, Installed Wind Capacity, http://www.windpoweringamerica.gov/wind_installed_capacity.asp .

⁶ Wind Energy Facts: Wyoming Wind, American Wind Energy Association, <http://www.awea.org/learnabout/publications/factsheets/upload/3Q-12-Wyoming.pdf>

⁷ United States Renewable Energy Technical Potential, National Renewable Energy Laboratory, http://www.nrel.gov/gis/re_potential.html .

⁸ Ibid.

At the same time, Wyoming is home to some of the nation's most significant environmental, cultural and historic resources, including Yellowstone National Park, the nation's first national park, established in 1872, and Devils Tower, the nation's first national monument, established in 1906. Wyoming is home to millions of acres of national forests and wilderness areas including the Medicine Bow, Big Horn, Bridger Teton and Shoshone national forests. The Federal Bureau of Land Management alone manages more than 17 million acres of federally owned land in Wyoming. These lands contain many national historic and cultural treasures including the Red Desert, Independence Rock, portions of the Oregon Trail, Register Cliff, the Medicine Wheel, and many others. The State of Wyoming also has established and maintains more than two dozen state parks and cultural resource areas.

Together these vast tracts of federal and state land, that are protected from development, provide some of the most unique, unspoiled and breathtaking vistas that can be found anywhere in the contiguous United States. It is said that an observer stationed at the Medicine Wheel, near Burgess Junction, Wyoming, (elevation 9,642 feet above sea level) can see portions of five states. Wyoming welcomes many visitors from around the country and across the globe each year to witness firsthand the spectacular wonders of the state.

In fact, in 2012, Wyoming welcomed more than eight and half million visitors to the state.⁹ These visitors made \$3.1 billion in direct expenditures, paid \$128 million in state and local taxes, and supported more than 30,000 jobs in the state. Tourism contributed 3% of Wyoming's gross domestic product in 2012. The agriculture industry, woven into the fabric of Wyoming's cultural identity since before statehood, remains an important part of the state's economy. In 2011, cash receipts for agricultural commodities produced by Wyoming ranchers and farmers totaled nearly \$1.5 billion making agriculture the third largest contributor to Wyoming's gross domestic product behind mining and tourism.¹⁰ Wyoming's farmers and ranchers are the original stewards of Wyoming's lands, employing innovative grazing and crop production techniques to avoid the harmful effects of over grazing and soil nutrient depletion which can lead to erosion and habitat destruction on both privately owned land and land leased from the state and federal governments.

⁹ Wyoming Office of Tourism, The Impact of Travel on Wyoming's Economy, <http://www.wyomingofficeoftourism.gov/industry/pdf/homepage/TravelImpactSheet.pdf>.

¹⁰ Wyoming Department of Agriculture, Wyoming 2013 – Just The Facts, http://eagiv.state.wy.us/Wy_facts/facts2013.pdf.

Habitat preservation practices also benefit the abundant wildlife found in Wyoming, of which some species, like the Bison, Pronghorn Antelope and Prairie Sage Grouse, are found predominantly in Wyoming. Agricultural lands are an important component of the view shed that the Wyoming Department of Environmental Quality (WDEQ) seeks to protect in its SIP.

Mineral Production, Tourism and Agriculture form the three legs of Wyoming's economic stool. Although mining and mineral production provide the largest percentage contribution of the three industries to Wyoming's gross domestic product, it is no more, or less, important than tourism and agriculture. Implementing policies that fail to protect the pristine nature of Wyoming's air, water and soil and degrade the quality of the unique geographical and physical resources discussed above, would be adverse to Wyoming's self-interest. Wyoming and its citizens have an obvious vital, immutable interest in preserving the resources and heritage of the state in which they live and work.

It is against this back drop that the OCA offers the following observations regarding the WDEQ's SIP and the re-proposed FIP advocated by EPA. The OCA has several concerns with the FIP and the process that was used to develop it. As mentioned earlier, the OCA is a public interest advocacy organization that represents the interests of utility consumers and Wyoming citizens in matters involving public utilities. The OCA advocates ratemaking practices and policies that promote access to safe, adequate, reliable and affordable service by utility consumers. Safe, adequate, reliable and affordable electric service to Wyoming consumers will be jeopardized if the FIP is implemented.

First, and foremost, implementation of the FIP will significantly increase the rates paid by Wyoming electric utility customers with no discernable improvement in visibility in the State's Class I areas. As has been pointed out by several witnesses in this proceeding, including Governor Matt Mead and WDEQ Director Todd Parfitt, this proceeding is not about public health or climate change issues. The Regional Haze provisions of the CAA do not target mercury, acid gases or carbon dioxide (CO₂). Rather, the Regional Haze requirements focus narrowly on improving visibility in national parks and wilderness areas. It is puzzling, therefore, that EPA has chosen to propose a rule that would vastly increase the cost of compliance with the

Regional Haze provisions of federal law but does nothing discernable to improve visibility in Wyoming's Class I areas.

Perhaps the starkest illustration of the contrast between the SIP proposed by Wyoming and the FIP proposed by EPA was given by Governor Mead who testified at the July 17, 2013 hearing in this matter that the state's SIP would reduce NO_x emissions by 63,000 tons annually while the FIP proposed by EPA would further reduce NO_x emissions by an incremental 2,900 tons annually. The incremental cost of achieving this small additional reduction, however, would require an additional capital investment of \$180 million and incremental annual operating costs of \$60 million.¹¹ On the capital side alone this indicates an increase in cost of nearly 20% but an incremental reduction in NO_x emissions of only 5%, a cost benefit ratio that is clearly not in the public interest.

Moreover, implementation of the SIP adopted by the WDEQ is not without cost. In fact, Wyoming rate payers and citizens have been and will continue to be impacted by implementation of the SIP as originally proposed by the WDEQ. Under the terms of the SIP, Wyoming utilities will be required to make improvements to their existing coal fired power plants, including the installation of Low NO_x burners, Selective Non-Catalytic Reduction (SNCR) systems, Selective Catalytic Reduction (SCR) systems, fabric filters, or a combination of all of those emission reduction systems at various plants around the state. In some cases, as with Rocky Mountain Power's (RMP) Naughton Unit 3, the unit will be converted to natural gas.

All of these compliance obligations have a cost associated with them. For the plants that will be upgraded to comply with the Best Available Retrofit Technology (BART) requirements under the Clean Air Act, the cost will be the new capital and annual operating costs associated with the emission systems that must be installed. For those that are converted it will be the capital associated with the conversion as well as the cost of acquiring replacement base load generation capacity since the converted plants will provide only a fraction of the generation capacity of the plant burning coal. And, for the plants that are retired it will be the capital cost of replacing the lost capacity as well as the cost to decommission the existing plant.

¹¹ Wyoming Department of Environmental Quality, Public Hearing Testimony before the Environmental Protection Agency, July 17, 2013.

These costs, assuming that they are prudently incurred, will be borne by Wyoming ratepayers in proportion to their use of the system. Make no mistake, shareholders will not pay these additional costs, ratepayers will. That is why it is critically important that we get the balance between ratepayer impacts and the reasonable progress requirement contained in the Regional Haze rule right. On average, electric rates for Wyoming customers have increased somewhere between 40 and 60 percent over the last decade, depending on the class of service and the electric provider. Electric utilities in Wyoming must continually make new investments in their existing systems to replace aging and inadequate distribution, transmission and generation infrastructure, as well as to provide for future growth in demand. Compliance with environmental requirements, including not only the Regional Haze rule, but the Mercury and Air Toxics Standard (MATS) rule and forthcoming rules on coal combustion residuals, cooling water intake structures and potential carbon regulations will be an increasingly large portion of the new capital that the utilities must deploy in order to continue providing safe, adequate and reliable service.

The OCA believes that the ratepayers and citizens that it represents are willing to accept the adoption of, and compliance with, common sense environmental rules and regulations. Certainly, the legal standards contained in the CAA are enforceable by the courts so compliance is not optional. Still, the CAA gives the EPA wide latitude in determining the appropriate limits for emissions under the Act and invites much discretion for the states. Investments that make tangible progress toward the goal of restoring natural visibility by 2064 are consistent with consumers' interest in safe, adequate and reliable service. It is baffling, therefore, that the EPA would reject a SIP adopted through hard won consensus, and based on science, and adopt a FIP that achieves no discernable improvement in visibility but dramatically increases the cost of compliance. That is the antithesis of the common sense environmental regulation that Wyoming utility consumers and citizens would accept as being reasonable. We know that compliance with the SIP will cause customer rates to increase. It doesn't make sense to further exacerbate that impact by requiring significant additional investments that will not lead to a discernable visibility improvement in the targeted Class I areas in Wyoming.

The OCA is also skeptical of the modeling and cost analysis undertaken by the EPA in concluding that the previously cited investments are cost effective for Wyoming ratepayers.

Having just participated in two recent dockets in which RMP sought authority to construct SCR units at Naughton Unit 3 and Jim Bridger Units 3 & 4, one of the most important conclusions that can be drawn from those cases is that no two of these projects are the same. None of these plants, whether they were originally constructed in the 1950s or 1960s, or in the 1970s or 1980s, were originally designed to accommodate the types of pollution control retrofit equipment contemplated in either the SIP or the FIP. Planning, engineering and installing this equipment takes time and must be done on a plant by plant basis. The cost of the installation depends on a number of factors, including, among other things, available space, the original design of the plant and the placement of existing environmental controls. Many of these costs are more or less fixed and don't depend on the size of the plant. The SIP adopted by the WDEQ makes a detailed and thorough accounting of all of these factors, as required by EPA's rules, and goes to great lengths in explaining how its determinations were made. EPA, in contrast, bases its cost effectiveness determination on national average retrofit costs for plants nationwide, scaled to fit specific Wyoming plants and subjectively adjusted by casual observation of satellite images of the Wyoming plants. A fair determination of the cost effectiveness of the FIP demands far more than a passing inspection of the Wyoming plants using satellite imagery.

Further, in its re-proposed rule, the EPA found that the limits and technologies mandated in the rule are cost effective based on amortizing those costs over a 20 year period. Here, the Agency's cost modeling is seriously flawed as many of the units subject to the new rule have remaining lives significantly less than 20 years. For example, Dave Johnston has a remaining life of only 14 years and Naughton 16 years. Amortizing the larger investment required by the FIP over these shorter lives would cause rates to go up even more, casting doubt on the veracity of the EPA's conclusion that the FIP is cost effective.

The OCA is also deeply concerned that the investments mandated under the FIP will have significant adverse impacts on the quality and reliability of service provided to Wyoming ratepayers. The SIP is a well vetted plan by the WDEQ and Wyoming stakeholders that, in association with other regulatory requirements such as the construction authority process, assures that Wyoming utilities will be able to comply with its requirements with the least amount of impact to customers. The FIP, on the other hand, with its more stringent control requirements and accelerated compliance deadlines, will assure not only that compliance is needlessly

expensive, but that it is also rushed, that scheduled outages can't be timed to minimize the cost of replacement power, and that third party vendors will have free reign in determining how much a particular project costs. To the extent that schedules can't be met, non-compliant plants will be forced out of service until the work is done. Such outages will necessitate the purchase of replacement power in the market and will result in diminishing system reserves, all of which will jeopardize system reliability and increase costs for ratepayers.

The North American Electric Reliability Company (NERC) has also expressed serious concerns about the impact to the reliability of the Bulk Electric System that may result from compliance with the Regional Haze rules and other CAA requirements. In its 2011 Long Term Reliability Assessment (LTRA), NERC found that:¹²

...EPA regulations may result in the potential loss of a significant amount of generation, either through retirements or de-rates associated with powering on-site environmental controls equipment, during a short time frame (2012-2015). Within this timeframe, some generators may not have enough time to acquire permits, engineering, equipment design, acquisition of equipment, and systematically shut down their units to install the necessary retrofitted equipment, while concurrently meeting reliability goals.

In its 2012 LTRA¹³, NERC found that:

Due largely to the unique confluence of final and potential environmental regulations, low natural gas prices, and other economic factors, about 71 GW of fossil-fired generation is projected to retire by 2022, with over 90 percent retiring by 2017. With the exception of ERCOT, the retirement of this capacity does not pose significant resource adequacy concerns. Reserve Margins are likely to be reduced, but to levels that are still above targets. However, retirements over the next three to four years may raise issues related to system stability and the need for transmission enhancements, which if not addressed could cause reliability concerns in some areas.

In its 2012 LTRA¹⁴, NERC further found that:

¹² 2011 Long Term Reliability Assessment, North American Electric Reliability Corporation, November 2011, http://www.nerc.com/files/2011%20LTRA_Final.pdf.

¹³ 2012 Long Term Reliability Assessment, North American Electric Reliability Corporation, November 2012, http://www.nerc.com/files/2012_LTRA_FINAL.pdf.

¹⁴ Ibid.

A significant generation retrofit effort is expected over the next 10 years in order to comply with federal and state level environmental regulations. A majority of environmental controls are expected to be put in place to meet air regulations by April 2016. In total, 339 unit-level retrofits on fossil-fired generation will be needed, totaling about 160 GW. However, there is still significant uncertainty in the forecasted values as maintenance schedules have not yet been fully evaluated by all areas.

So, although the most recent LTRA issued by NERC indicates somewhat less concern regarding the stability and reliability of the Bulk Electric System, nevertheless, uncertainty regarding the timing of retrofits and the ability of utilities to accommodate accelerated compliance schedules remains.

Finally, the rule implementing the FIP will have serious adverse impacts to the general citizenry of Wyoming. Rocky Mountain Power alone employs more than 1,400 Wyoming citizens, many of whom work in the coal fired plants and coal mines owned by the Company. Countless others work in unaffiliated mines and other businesses on which Rocky Mountain Power depends to keep its generation fleet running safely and reliably. Wyoming electric utilities provide more than \$50 million annually in property taxes to the state and to local governments, a large portion of which is tied directly to investments in base load, coal fired generation plants located in Wyoming. Those tax dollars support K-12 education, local road and infrastructure projects and public safety operations, among other needs. In many cases whole communities have grown up around these plants and depend on them for economic survival. To the extent that the new rule makes coal fired generation plants in Wyoming uneconomic to run, those plants will be closed and replaced with higher cost generating resources, likely natural gas plants located closer to population centers outside of Wyoming. In the process, local economies will be devastated, many good paying jobs will be lost and the economic vitality of the state and its citizens will be diminished.

In summary, the State of Wyoming is a state of many wonders and contains many of the nation's most important geographic, historic and cultural treasures. Wyoming is also the repository of much of the country's energy wealth, both renewable and non-renewable, and produces that energy in abundance for the benefit of citizens across the country. Wyoming is committed to the preservation of its heritage and its environment but recognizes the critical need to balance

environmental sustainability with economic viability. The OCA strongly believes, for the reasons set out above, that the SIP adopted by WDEQ strikes the appropriate balance between these goals.

Wyoming is a prosperous state populated by an enterprising and enlightened citizenry. Wyoming citizens enjoy a high quality of life due in no small part to the availability of affordable and reliable electric service. That high quality of life has been achieved over many years, not by happenstance, but through thoughtful planning. Implementation of the FIP will turn Wyoming's carefully laid Regional Haze compliance plan on its head. The FIP will result in greatly increased capital investment in control devices and accelerated deadlines for compliance in comparison to the SIP previously issued by the WDEQ. These increased investments, however, will result in no discernable improvement in visibility in Wyoming's Class I Areas. Adoption of the FIP will have serious and long lasting adverse impacts on the citizens and ratepayers of the state of Wyoming. The WDEQ's approval of the SIP was based on solid analysis of the estimated cost to retrofit each source in the plan, pursuant to the BART rules, unlike the EPA's analysis which is based on average installation costs scaled to fit the various sources in Wyoming, adjusted through a subjective and cursory inspection of satellite imagery. The EPA's cost effectiveness determination is also based on unreasonably long amortization periods. The OCA strongly believes that EPA should defer to the determination of the state in this matter and urges EPA not to adopt the rule as it was re-proposed in May of this year and instead adopt the SIP developed by the WDEQ.

Respectfully Submitted;

A handwritten signature in cursive script, reading "Bryce J. Freeman". The signature is written in dark ink on a light-colored, textured background.

Bryce J. Freeman, Administrator

cc: Governor Matt Mead
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